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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/815,479

03/31/2004

Hiroshi Itoh

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EXAMINER

PINKNEY, DAWAYNE

ART UNIT

PAPER NUMBER

2873

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/815,479	Applicant(s) ITOHI, HIROSHI	
	Examiner DaWayne A. Pinkney	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/09/2006 and 09/17/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 03/31/2004 was considered by the examiner.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 10-12, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Berger et al. (US 5, 912, 720).

Regarding **claim 1**, Berger discloses, an ophthalmologic image pickup system, comprising:

an image pickup device including; image data generation means for generating image data of an eye fundus to be examined (Column 3, lines 41-44, Column 5, lines 13-25 and 10 and 14 of Fig. 1);

the device information generation means for generating the device information to identify the device (which is deemed inherent); and

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data output means for outputting the image data and the device information, and an image-processing device including (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1);

data input means for inputting the image data and the device information, and the device information, said data output means of the image pickup device (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1);

device information determination means for determining the image pickup device based on the device information inputted through the data input means (Column 3, lines 41-44, Column 4, lines 7-10 and Fig. 1); and

image processing means for performing different image processings on the image data in accordance with a determination result of the device information determination means (Column 3, lines 1-3, Column 3, lines 58-64 and Column 6, lines 44-47).

Regarding **claim 8**, Berger discloses, an ophthalmologic image pickup system according to claim 1, wherein the device information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the device information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 10**, Berger discloses, an ophthalmologic image pickup system, comprising:

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an image pickup device including image data generation means for picking up an image of an eye to be examined to generate image data thereof (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 13-25 and 10 and 14 of Fig. 1); and

an image processing apparatus including: image pickup information determination means for determining inputted image pickup information (Column 3, lines 1-3, Column 3, lines 58-64 Column 5, lines 34-36); and image processing means for performing different image processings on the image data in accordance with a result of the image pickup information determination means (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36).

Regarding **claim 11**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup device further comprises image pickup information generation means for generating image pickup information related to an image pickup mode upon image pickup (which is deemed inherent), the image pickup information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the image pickup information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 12**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup mode is one of a color image pickup mode, a Fluorescein fundus angiography mode, and an Indocyanine green angiography mode (Column 1, lines 57-61, Column 3, lines 46-51 and Column 6, lines 29-33).

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Regarding **claim 15**, Berger discloses, an ophthalmologic image processing apparatus, comprising:

image processing means for processing image data outputted from an ophthalmologic image pickup device (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36); and

device information determination means for determining device information inputted from the ophthalmologic image pickup device (which is deemed inherent),

wherein the image data is processed in accordance with the determined device information (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36).

Regarding **claim 17**, Berger discloses, an ophthalmologic image pickup device, comprising:

image data generation means for picking up an eye fundus image of an eye to be examined to generate image data thereof (Column 3, lines 41-44, Column 5, lines 13-25 and 10 and 14 of Fig. 1);

device information generation means for generating device information of the ophthalmologic image pickup device (which is deemed inherent); and

output means for adding the device information to the image data and outputting the image data to which the device information is added (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2-7, 9, 13-14, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US 5, 912, 720) as applied to claims 1, 10 and 15 above, further in view of .

The cited primary reference, Berger remains as applied to **claims 1, 10 and 15 above**.

The cited primary reference does not teach the image pickup device information includes information indicating whether or not at least one of processing for vertically reversing the image data and processing for horizontally reversing the image data with the image processing means should be performed by the image processing apparatus.

The added secondary reference, The Admitted Prior Art discloses, an ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information indicating whether or not at least one of processing for vertically reversing the image data and processing for horizontally reversing the image data with the image processing means should be performed by the image processing apparatus (Page 2, lines 1-5 in The Admitted Prior Art of the instant specification).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the image pickup device processing of The Admitted Prior Art with the device of Berger because the image pickup device processing of The Admitted Prior Art is conventional.

Regarding **claim 3**, The Admitted Prior Art discloses, An ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information indicating whether or not the image data should be synthesized with an electronic aperture mask by means of the image processing means (Page 2, lines 5-8).

Regarding **claim 4**, Berger discloses, an ophthalmologic image pickup system, comprising:

a plurality of image pickup devices, each of which picks up an image of an eye to be examined to generate image data thereof (Column 5, lines 13-17 and Column 6, lines 12-14);

device information determination means for determining inputted device information related to the image pickup device (which is deemed inherent); and

image processing means for performing different image processings on the image data in accordance with a determination result of the device information determination means and the processing table (Column 3, lines 1-3, Column 3, lines 58-64 and Column 6, lines 44-47).

Neither Berger nor The Admitted Prior Art disclose a processing table showing an image data processing method corresponding to each of the plurality of image pickup devices, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the image processing means to display the image data processing method to be performed on each of the images captured by the image pickup devices in some form (table, chart, listing, etc.) because



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this allows the examiner to see the image data processing method that is to be performed on the images captured by the image pickup devices.

Regarding **claim 5**, Berger discloses, an ophthalmologic image pickup system according to claim 4, wherein the device information includes a description of a kind of the image pickup device (which is deemed inherent).

Regarding **claim 6**, The Admitted Prior Art discloses, the image data is subjected to reverse processing (Page 2, lines 10-15).

Neither Berger nor The Admitted Prior Art disclose the processing method shown in the processing table relates to whether or not at least one of the processing in which the image data is horizontally or vertically reversed should be performed, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the processing table to relate to whether or not reverse processing should be performed because this is a conventional image process performed by ophthalmologic devices. Therefore, the user of the image processing means should have the option to perform this image processing method.

Regarding **claim 7**, The Admitted Prior Art discloses, an electric aperture mask with the image data is performed (Page 2, lines 5-8).

Neither Berger nor The Admitted Prior Art disclose the processing method shown in the processing table is whether the composition of an electric aperture mask with the image data should be performed or not, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the processing method shown in the processing table is whether the composition of an electric aperture mask with the image data should be performed or not because this is a conventional image process performed by ophthalmologic devices.

Therefore, the user of the image processing means should have the option to perform this image processing method.

Regarding **claim 9**, neither Berger nor The Admitted Prior Art disclose, the image data and the device information are separately inputted to the device information determination means.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the device information are separately inputted to the device information determination means because the device information must be sent first in order for the device to be recognized so that the image data can be sent to the image processing device.

Regarding **claim 13**, The Admitted Prior Art discloses, an ophthalmologic image pickup system according to claim 10, wherein the different image processing include at least one of conversion of the image data into a white-and-black image,  $\gamma$  characteristic adjustment thereof, and contrast processing thereof when the image pickup mode is one of the Fluorescein fundus angiography mode and the Indocyanine green angiography mode (Page 3, lines 2-14).

Regarding **claim 14**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup device further comprises image pickup information generation means for generating image pickup information related to an image pickup mode upon image pickup (which is deemed inherent).

Neither Berger nor The Admitted Prior Art disclose, the image data and the image pickup information are separately inputted to the device information determination means.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the image pickup information are separately inputted to the device information determination means because the device information must be sent first in order for the device to be recognized so that the image data can be sent to the image processing apparatus.

Regarding **claim 16**, The Admitted Prior Art discloses, an ophthalmologic image processing apparatus according to claim 15, wherein at least one of processing for vertically reversing the image data, processing for horizontally reversing the image data, and processing for synthesizing an aperture with the image data is performed in accordance with the device information (Page 2, lines 1-5).

Regarding **claim 18**, The Admitted Prior Art discloses, An ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information indicating whether or not the image data should be synthesized with an electronic aperture mask by means of the image processing means (Page 2, lines 5-8).

Regarding **claim 19**, Berger discloses, an ophthalmologic image pickup system according to claim 4, wherein the device information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the device information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 20**, neither Berger nor The Admitted Prior Art disclose, the image data and the device information are separately inputted to the device information determination means.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the device information are separately inputted to the device information determination means because the device information must be sent first in order for the device to be recognized so that the image data can be sent to the image processing device.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following disclosures substantially teach an ophthalmologic apparatus with an image pickup device and an image processing device:

Newman et al. (US 2005/0094099)

Eberl et al. (US 2002/0036750)

Itoh (US 2001/0028439)

Masaki (US 2004/0156019)

Kudryashov et al. (US 6, 736, 507)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DaWayne A. Pinkney whose telephone number is (571) 270-1305. The examiner can normally be reached on Monday-Thurs. 8 a.m.- 4:30 p.m..

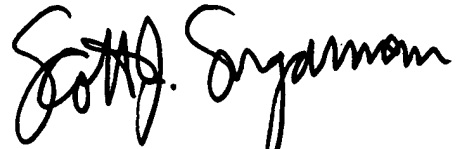
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DAP



Scott J. Sugerman  
Primary Examiner